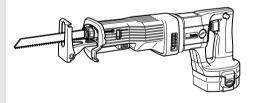


Cordless Recipro Saw

Equipped with Electric Brake MODEL JR180D



002476

INSTRUCTION MANUAL

⚠ WARNING:

For your personal safety, READ and UNDERSTAND before using. SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE.

www.makitatools.com

SPECIFICATIONS

| Model | JR180D | | | |
|--------------------|--------------------------|---------|---------|---------|
| Length of stroke | 23 mm (7/8") | | | |
| Strokes per minute | 0 - 2,700/min | | | |
| Overall length | 469 mm (18-1/2") | | | |
| Net weight | 3.5 kg (7.7 lbs) | | | |
| Battery Charger | DC1804 | | | |
| Input | A. C. only 50 Hz - 60 Hz | | | |
| Output | D. C. 7.2 V - 18 V | | | |
| Battery Cartridge | 1822 | 1833 | 1834 | 1835 |
| Voltage | 18 V | | | |
| Charging time | 45 min. | 50 min. | 60 min. | 70 min. |

- Manufacturer reserves the right to change specifications without notice.
- Specifications may differ from country to country.

GENERAL SAFETY RULES

USA003-1

(FOR All BATTERY OPERATED TOOLS)

⚠ WARNING:

Read and understand all instructions. Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

SAVE THESE INSTRUCTIONS

Work Area

- Keep your work area clean and well lit.
 Cluttered benches and dark areas invite accidents
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Power
- tools create sparks which may ignite the dust or fumes.
- Keep bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

Electrical Safety

- 4. A battery operated tool with integral batteries or a separate battery pack must be recharged only with the specified charger for the battery. A charger that may be suitable for one type of battery may create a risk of fire when used with another battery.
- Use battery operated tool only with specifically designated battery pack. Use of any other batteries may create a risk of fire.

Personal Safety

- 6. Stay alert, watch what you are doing, and use common sense when operating a power tool. Do not use tool while tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Dress properly. Do not wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts.
- Avoid accidental starting. Be sure switch
 is in the locked or off position before
 inserting battery pack. Carrying tools with
 your finger on the switch or inserting the battery pack into a tool with the switch on invites
 accidents.
- Remove adjusting keys or wrenches before turning the tool on. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.
- 10. Do not overreach. Keep proper footing and balance at all times. Proper footing and balance enable better control of the tool in unexpected situations.
- 11. Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hard hat, or hearing protection must be used for appropriate conditions.

Tool Use and Care

- 12. Use clamps or other practical way to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.
- 13. Do not force tool. Use the correct tool for your application. The correct tool will do the job better and safer at the rate for which it is designed.
- 14. Do not use tool if switch does not turn it on or off. A tool that cannot be controlled with the switch is dangerous and must be repaired.
- 15. Disconnect battery pack from tool or place the switch in the locked or off position before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.
- 16. Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.
- 17. When battery pack is not in use, keep it away from other metal objects like: paper clips, coins, keys, nails, screws, or other small metal objects that can make a connection from one terminal to another. Shorting the battery terminals together may cause sparks, burns, or a fire.
- 18. Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edge are less likely to bind and are easier to control.
- 19. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.
- 20. Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may create a risk of injury when used on another tool.

SERVICE

- 21. Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel may result in a risk of injury.
- 22. When servicing a tool, use only identical replacement parts. Follow instructions in the Maintenance section of this manual. Use of unauthorized parts or failure to follow Maintenance instructions may create a risk of shock or injury.

SPECIFIC SAFETY RULES

USB029-2

DO NOT let comfort or familiarity with product (gained from repeated use) replace strict adherence to cordless recipro saw safety rules. If you use this tool unsafely or incorrectly, you can suffer serious personal injury.

- Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring. Contact with a "live" wire will make exposed metal parts of the tool "live" and shock the operator.
- Be aware that this tool is always in an operating condition, because it does not have to be plugged into an electrical outlet.
- Always use safety glasses or goggles. Ordinary eye or sun glasses are NOT safety glasses.
- Avoid cutting nails. Inspect workpiece for any nails and remove them before operation.
- 5. Do not cut oversize workpiece.
- Check for the proper clearance beyond the workpiece before cutting so that the blade will not strike the floor, workbench, etc.
- 7. Hold the tool firmly.
- Make sure the blade is not contacting the workpiece before the switch is turned on.
- 9. Keep hands away from moving parts.

- Always switch off and wait for the blade to come to a complete stop before removing the blade from the workpiece.
- Do not touch the blade or the workpiece immediately after operation; they may be extremely hot and could burn your skin.
- Some material contains chemicals which may be toxic. Take caution to prevent dust inhalation and skin contact. Follow material supplier safety data.

SAVE THESE INSTRUCTIONS

↑ WARNING:

MISUSE or failure to follow the safety rules stated in this instruction manual may cause serious personal injury.

SYMBOLS USD301-1

IMPORTANT SAFETY INSTRUCTIONS FOR CHARGER & BATTERY CARTRIDGE

USC001-3

- SAVE THESE INSTRUCTIONS This manual contains important safety and operating instructions for battery charger.
- Before using battery charger, read all instructions and cautionary markings on (1) battery charger, (2) battery, and (3) product using battery.
- CAUTION To reduce risk of injury, charge only MAKITA rechargeable batteries marked on the charger label. Other types of batteries may burst causing personal injury and damage.
- 4. Do not expose charger to rain or snow.
- Use of an attachment not recommended or sold by the battery charger manufacturer may result in a risk of fire, electric shock, or injury to persons.

- To reduce risk of damage to electric plug and cord, pull by plug rather than cord when disconnecting charger.
- Make sure cord is located so that it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- An extension cord should not be used unless absolutely necessary. Use of improper extension cord could result in a risk of fire and electric shock. If extension cord must be used, make sure:
 - That pins on plug of extension cord are the same number, size, and shape as those of plug on charger;
 - b. That extension cord is properly wired and in good electrical condition;
 - That wire size is at least as large as the one specified in the table below.

Table 1: RECOMMENDED MINIMUM AWG SIZE FOR EXTENSION CORDS FOR BATTERY CHARGERS

| Length of Cord (Feet) | 25 | 50 | 100 | 150 |
|-----------------------|----|----|-----|-----|
| AWG Size of Cord | 18 | 18 | 18 | 16 |

- 9. Do not operate charger with damaged cord or plug replace them immediately.
- Do not operate charger if it has received a sharp blow, been dropped, or otherwise damaged in any way; take it to a qualified serviceman.
- 11. Do not disassemble charger or battery cartridge; take it to a qualified serviceman when service or repair is required, Incorrect reassembly may result in a risk of electric shock or fire.
- To reduce risk of electric shock, unplug charger from outlet before attempting any maintenance or cleaning. Turning off controls will not reduce this risk.

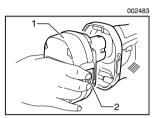
- The battery charger is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the battery charger.
- 15. If operating time has become excessively shorter, stop operating immediately. It may result in a risk of overheating, possible burns and even an explosion.
- 16. If electrolyte gets into your eyes, rinse them out with clear water and seek medical attention right away. It may result in loss of your eyesight.

ADDITIONAL SAFETY RULES FOR CHARGER & BATTERY CARTRIDGE

- Do not charge Battery Cartridge when temperature is BELOW 10°C (50°F) or ABOVE 40°C (104°F).
- Do not attempt to use a step-up transformer, an engine generator or DC power receptacle.
- Do not allow anything to cover or clog the charger vents.
- Always cover the battery terminals with the battery cover when the battery cartridge is not used.
- 5. Do not short the battery cartridge:
 - (1) Do not touch the terminals with any conductive material.
 - (2) Avoid storing battery cartridge in a container with other metal objects such as nails, coins, etc.

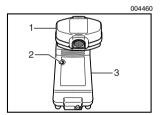
- (3) Do not expose battery cartridge to water or rain.
- A battery short can cause a large current flow, overheating, possible burns and even a breakdown.
- Do not store the tool and Battery Cartridge in locations where the temperature may reach or exceed 50°C (122°F).
- Do not incinerate the Battery Cartridge even if it is severely damaged or is completely worn out. The battery cartridge can explode in a fire.
- 8. Be careful not to drop, shake or strike battery.
- Do not charge inside a box or container of any kind. The battery must be placed in a well ventilated area during charging.

FUNCTIONAL DESCRIPTION



1. Battery cartridge

2. Button



- 1. Battery cartridge
- 2. Charging light
- 3. Battery charger

↑ CAUTION:

 Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking function on the tool.

Installing or removing battery cartridge

- Always switch off the tool before insertion or removal of the battery cartridge.
- To remove the battery cartridge, withdraw it from the tool while pressing the buttons on both sides of the cartridge.
- To insert the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Always insert it all the way until it locks in place with a little click. If not, it may accidentally fall out of the tool, causing injury to you or someone around you.
- Do not use force when inserting the battery cartridge. If the cartridge does not slide in easily, it is not being inserted correctly.

Charging

- 1. Plug the battery charger into the proper AC voltage source. The charging light will flash in green color.
- Insert the battery cartridge so that the plus and minus terminals on the battery cartridge are on the same sides as their respective markings on the charger. Insert the cartridge fully into the port so that it rests on the charger port floor.
- 3. When the battery cartridge is inserted, the charging light color will change from green to red and charging will begin. The charging light will remain lit steadily during charging.
- 4. When the charging light color changes from red to green, the charging cycle is complete.
- 5. If you leave the battery cartridge in the charger after the charging cycle is complete, the charger will switch into its "trickle charge (maintenance charge)" mode.
- After charging, unplug the charger from the power source.

NOTE:

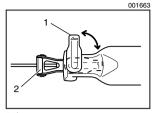
- The battery charger is for charging Makita battery cartridge. Never use it for other purposes or for other manufacturer's batteries.
- When you charge a new battery cartridge or a battery cartridge which has not been used for a long period of time, it may not accept a full charge. This is a normal condition and does not indicate a problem. You can recharge the battery cartridge fully after discharging it completely and recharging a couple of times.
- If you charge a battery cartridge from a just operated tool or a battery cartridge which has been left in a location exposed to direct sunlight or heat for a long time, the charging light may flash in red color. If this occurs, wait for a while. Charging will begin after the battery cartridge cools. The battery cartridge will cool faster if you remove the battery cartridge from the battery charger.
- If the charging light flashes alternately in green and red color, charging is not possible. The terminals on the charger or battery cartridge are clogged with dust or the battery cartridge is worn out or damaged.

Trickle charge (Maintenance charge)

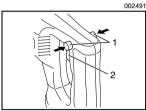
If you leave the battery cartridge in the charger to prevent spontaneous discharging after full charge, the charger will switch into its "trickle charge (maintenance charge)" mode and keep the battery cartridge fresh and fully charged.

Tips for maintaining maximum battery life

- Charge the battery cartridge before completely discharged.
 - Always stop tool operation and charge the battery cartridge when you notice less tool power.
- 2. Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
- 3. Charge the battery cartridge with room temperature at 10°C 40°C (50°F 104°F).
 - Let a hot battery cartridge cool down before charging it.
- 4. Charge the Nickel Metal Hydride battery cartridge when you do not use it for more than six months.



- 1. Lever
- 2. Shoe



1. Lock-off button

2. Switch trigger

When the blade loses its cutting efficiency in one place along its cutting edge, reposition the shoe to utilize a sharp, unused portion of its cutting edge. This will help to lengthen the life of the blade. To reposition the shoe, loosen the lever counterclockwise and slide the shoe forward or back to the desired position. Then tighten the lever clockwise to firmly secure the shoe.

Switch action

↑ CAUTION:

 Before inserting the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

To prevent the switch trigger from accidentally pulled, a lock-off button is provided.

To start the tool, press in the lock-off button and pull the switch trigger. The lock-off button can be pressed in from either left or right side of the tool.

Tool speed is increased by increasing pressure on the switch trigger. Release the switch trigger to stop.

Electric brake

This tool is equipped with an electric brake. If the tool consistently fails to quickly stop after switch trigger release, have tool serviced at a Makita service center.

ASSEMBLY

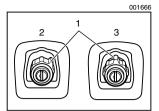
△ CAUTION:

 Always be sure that the tool is switched off and the battery cartridge is removed before carrying out any work on the tool.

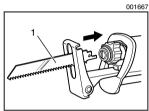
Installing or removing saw blade

⚠ CAUTION:

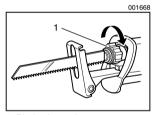
 Always clean out all chips or foreign matter adhering to the blade, blade clamp and/or slider. Failure to do so may cause insufficient tightening of the blade, resulting in a serious injury.



- 1. Blade clamp sleeve
- 2. Released position
- 3. Fixed position



1. Blade



1. Blade clamp sleeve

OPERATION

To install the saw blade, always make sure that the blade clamp sleeve is in released position before inserting the saw blade. If the blade clamp sleeve is in fixed position, rotate the sleeve to the released position.

Insert the saw blade into the blade clamp as far as it will go. The blade clamp sleeve rotates and the saw blade is fixed. Make sure that the saw blade cannot be extracted even though you try to pull it out.

NOTE:

 If you do not insert the saw blade deep enough, the saw blade may be ejected unexpectedly during operation.
 This can be extremely dangerous.

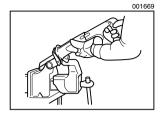
To remove the saw blade, rotate the blade clamp sleeve in the direction of the arrow fully. The saw blade is removed and the blade clamp sleeve is fixed at the released position.

NOTE:

 If you remove the saw blade without rotating the blade clamp sleeve fully, the sleeve may not be fixed. In this case, rotate the blade clamp sleeve fully, then make the sleeve fixed at the released position.

⚠ CAUTION:

- Always press the shoe firmly against the workpiece during operation. If the shoe is held away from the workpiece during operation, strong vibration and/or twisting will be produced, causing the blade to snap dangerously.
- Always wear gloves to protect your hands from hot flying chips when cutting metal.
- Be sure to always wear suitable eye protection which conforms with current national standards.
- Always use a suitable coolant (cutting oil) when cutting metal. Failure to do so will cause premature blade wear.



Press the shoe firmly against the workpiece. Do not allow the tool to bounce. Bring the blade into light contact with the workpiece. First, make a pilot groove using a slower speed. Then use a faster speed to continue cutting.

NOTF:

If the tool is operated continuously until the battery cartridge has discharged, allow the tool to rest for 15 minutes before proceeding with a fresh battery.

MAINTENANCE

Always be sure that the tool is switched off and the battery cartridge is removed before attempting to perform inspection or maintenance.

1. Limit mark

Replacing carbon brushes

Remove and check the carbon brushes regularly. Replace when they wear down to the limit mark. Keep the carbon brushes clean and free to slip in the holders. Both carbon brushes should be replaced at the same time. Use only identical carbon brushes.



1. Brush holder cap

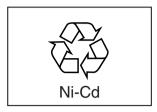
2. Screwdriver

Use a screwdriver to remove the brush holder caps. Take out the worn carbon brushes, insert the new ones and secure the brush holder caps.

After replacing brushes, insert the battery cartridge into the tool and break in brushes by running tool with no load for about 1 minute. Then check the tool while running and electric brake operation when releasing the switch trigger. If electric brake is not working well, ask your local Makita service center for repair.

To maintain product SAFETY and RELIABILITY, repairs, any other maintenance or adjustment should be performed by Makita Authorized or Factory Service Centers, always using Makita replacement parts.

EN0001-1



Recycling the Battery

The only way to dispose of a Makita battery is to recycle it. The law prohibits any other method of disposal.

To recycle the battery:

- 1. Remove the battery from the tool.
- Take the battery to your nearest Makita Factory Service Center

or

b) Take the battery to your nearest Makita Authorized Service Center or Distributor that has been designated as a Makita battery recycling location.

Call your nearest Makita Service Center or Distributor to determine the location that provides Makita battery recycling. See your local Yellow Pages under "Tools-Electric".

ACCESSORIES

 These accessories or attachments are recommended for use with your Makita tool specified in this manual. The use of any other accessories or attachments might present a risk of injury to persons. Only use accessory or attachment for its stated purpose.

If you need any assistance for more details regarding these accessories, ask your local Makita service center.

- Recipro saw blades
- Various type of Makita genuine batteries and chargers
- Plastic carrying case

First-Class
Postage
Required

Post Office will
not deliver
without proper
postage.

Makita U.S.A., Inc. 14930 Northam Street

La Mirada, CA 90638-5753

Hdallaallaalldalalddaddalallalall

MAIL THIS PORTION

Your answers to the following questions are appreciated.

| . This product was purchased from: | | | | 3. How did you learn abou | 3. How did you learn about this product: | | | |
|---|-----------------|-------|----|--|---|--|--|--|
| Home Center Hardware/Lumber Tool Distributor Industrial Supply Construction Sup | r Store | her (|) | Magazine From Dealer Newspaper Store Display Catalog | Radio Exhibition From Friend Previous Usage Other () | | | |
| . Use of the produc | | | | 4. Most favored points are | | | | |
| Construction Trac Industrial Mainte Home Maintenar Hobby Other (| nance | | | Design Features Size Price Makita Brand | Repair Service Durability Power Other () | | | |
| . Any comments: | | | | | | | | |
| DATE PURCHASED | | | | MODEL NO. | | | | |
| MONTH | DAY | YE | AR | SERIAL NO. | | | | |
| INTL. LAST NAM | ME / COMPANY NA | AME | | | STATUS SEX Married Single M F | | | |
| | | | | | | | | |
| STREET ADRESS | | | | | | | | |
| CITY | | | | | | | | |
| STATE | ZIP | CODE | | PHONE | AREA CODE | | | |
| | | | | | | | | |
| AGE: | Under 19 | 20-29 | | 30-39 40-49 | 50-60 Over 60 | | | |
| | | | | | AIN FOR YOUR RECORDS. | | | |

Paste

Paste

Paste

Facsimile No: (714) 522-8133

Paste

Please return this portion by facsimile or mail.

Paste

Paste

Paste

Dooto

Ра

FACTORY SERVICE CENTERS

1-800-4-MAKITA

RETAIN THIS PORTION FOR YOUR RECORDS

ARIZONA

3707 E. Broadway Rd., Ste. 6 Phoenix, AZ 85040 (602) 437-2850

CALIFORNIA

41850 Christy St. Fremont, CA 94538-5107 (510) 657-9881

14930 Northam St. La Mirada, CA 90638-5753 (714) 522-8088

1970 Fulton Avenue Sacramento, CA 95825 (916) 482-5197

7674 Clairemont Mesa Blvd. San Diego, CA 92111 (858) 278-4471

16735 Saticoy St., Ste. 105 Van Nuys, CA 91406 (818) 782-2440

COLORADO

11839 E. 51st Ave. Denver, CO 80239-2709 (303) 371-2850

FLORIDA

750 East Sample Road Pompano Beach, FL 33064 (954) 781-6333

GEORGIA

4680 River Green Parkway NW Duluth, GA 30096 (770) 476-8911

ILLINOIS

1450 Feehanville Dr. Mt. Prospect, IL 60056-6011 (847) 297-3100

MARYLAND

7397 Washington Boulevard, Suite 104 Elkridge, MD 21075 (410) 796-4401

MASSACHUSETTS

232 Providence Hwy. Westwood, MA 02090 (781) 461-9754

MINNESOTA

6427 Penn Ave. South Richfield, MN 55423 (612) 869-5199

MISSOURI

9876 Watson Road St. Louis, MO 63126-2221 (314) 909-9889

NEBRASKA

4129 S. 84th St. Omaha, NE 68127 (402) 597-2925

NEVADA

3375 S. Decatur Blvd. Suites. 22 - 24 Las Vegas, NV 89102 (702) 368-4277

NEW JERSEY 251 Herrod Blvd.

251 Herrod Blvd. Dayton, NJ 08810-1539 (609) 655-1212

NEW YORK

4917 Genessee Street Cheektowaga, NY 14225 (716) 685-9503

OREGON

828 19th Avenue, N.W. Portland, OR 97209 (503) 222-1823

PENNSYLVANIA

1704 Babcock Blvd. Pittsburgh, PA 15209 (412) 822-7370

PUERTO RICO

200 Guayama St. Hato Rey, PR 00917 (787) 250-8776

TENNESSEE

1120 Elm Hill P. Suile 170 Nashville, TN 372 (615) 248-3321

TEXAS

12801 Stemmons Fwy Ste. 809 Farmers Branch, TX 75234 (972) 243-1150

12701 Directors Dr. Stafford, TX 77477-3701 (281) 565-8665

3453 IH-35 North, Ste. 101 San Antonio, TX 78219 (210) 228-0676

WISCONSIN

Lincoln Plaza Shopping Ctr. 2245 S. 108th St. West Allis, WI 53227 (414) 541-4776

CUSTOMER'S RECORD

| When you need service: Send complete tool (prepaid) to one of the Makita Factory Service | Date Purchased |
|---|-------------------------|
| | Dealer's Name & Address |
| Centers listed, or to an Authorized Makita Service Center. Be sure | |
| to attach a letter to the outside of the carton detailing the problem with your tool. | Model No. |
| | Serial No. |

WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- lead from lead-based paints,
- crystalline silica from bricks and cement and other masonry products, and
- arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

MAKITA LIMITED ONE YEAR WARRANTY

Warranty Policy

Every Makita tool is thoroughly inspected and tested before leaving the factory. It is warranted to be free of defects from workmanship and materials for the period of ONE YEAR from the date of original purchase. Should any trouble develop during this one year period, return the COMPLETE tool, freight prepaid, to one of Makita's Factory or Authorized Service Centers. If inspection shows the trouble is caused by defective workmanship or material, Makita will repair (or at our option, replace) without charge.

This Warranty does not apply where:

- · repairs have been made or attempted by others:
- repairs are required because of normal wear and tear:
- the tool has been abused, misused or improperly maintained:
- alterations have been made to the tool.

IN NO EVENT SHALL MAKITA BE LIABLE FOR ANY INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES FROM THE SALE OR USE OF THE PRODUCT. THIS DISCLAIMER APPLIES BOTH DURING AND AFTER THE TERM OF THIS WARRANTY.

MAKITA DISCLAIMS LIABILITY FOR ANY IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF "MERCHANTABILITY" AND "FITNESS FOR A SPECIFIC PURPOSE," AFTER THE ONE YEAR TERM OF THIS WARRANTY.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Some states do not allow limitation on how long an implied warranty lasts, so the above limitation may not apply to you.

Makita Corporation of America

2650 Buford Hwy., Buford, GA 30518